

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

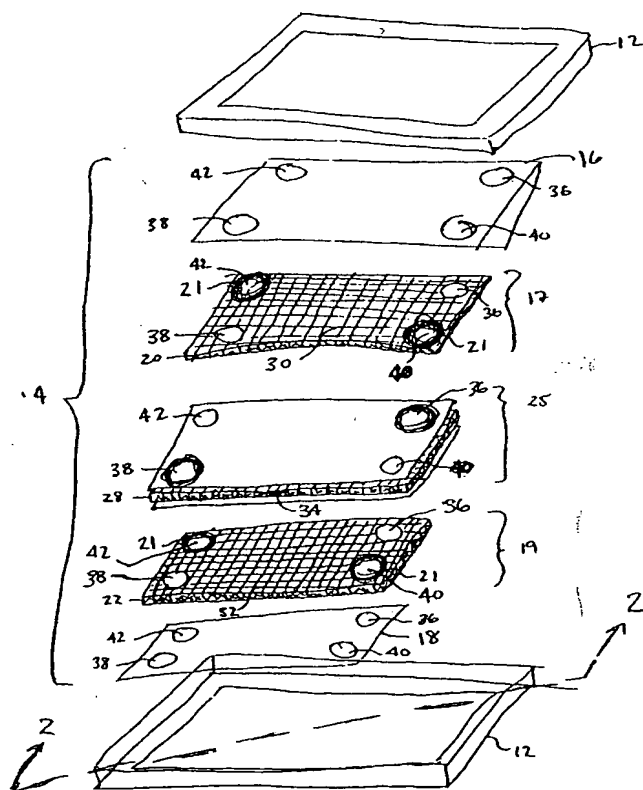
(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
30 October 2003 (30.10.2003)

PCT

(10) International Publication Number
WO 03/088864 A2

- (51) International Patent Classification⁷: **A61F** (74) Agents: **RONNING, JR., Royal, N. et al.**; Amersham Biosciences Corp, 800 Centennial Avenue, Piscataway, NJ 08855 (US).
- (21) International Application Number: **PCT/US03/12068**
- (22) International Filing Date: **17 April 2003 (17.04.2003)** (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
60/373,983 19 April 2002 (19.04.2002) US
60/425,199 8 November 2002 (08.11.2002) US
- (71) Applicant (*for all designated States except US*): **AMERSHAM BIOSCIENCES CORP [US/US]**; 800 Centennial Avenue, Piscataway, NJ 08855 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): **HERCZEG, Attila [US/US]**; 4 Jacobs Lane, Southborough, MA 01772 (US).
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: **SHAPED FLOW DISTRIBUTION IN FILTRATION CASSETTES**

(57) **Abstract:** The present invention improves the flow dynamics about the leading edges of the sealed apertures within a filtration cassette by flowing a sealing resin so that it protrudes into the main passageway defined by the porous screens thereof. The sealing resin defines at least an end portion of a fluid channel in each passageway. Desirably, the sealing resin extends into the passageways so as to significantly reduce or eliminate the formation of non-uniformities in fluid flow therethrough. The porous mesh may define apertures shaped so as to direct the resin during vacuum drawing to a desired location in the flow channels. The porous mesh may further include a shaped perimetrical edge which also assists in the drawing of a flowable resin into the porous mesh to further define the flow channels so as to significantly reduce or eliminate the formation of non-uniformities in the fluid flow.

WO 03/088864 A2

BEST AVAILABLE COPY